REMARKS

This responds to the Office Action mailed on June 25, 2007. Reconsideration is respectfully requested.

Claims 4, 6, 10, 15, 24, 25, 27, 28 and 30 are amended, and claim 29 is canceled; as a result, claims 1 – 28 and 30 are now pending in this application.

Allowable Subject Matter

Claims 4-6, 10, 14, 15, 22, 23, 25, 27 and 29 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 has been rewritten in independent form including all of the limitations of the base claim 1, and is therefore believed to be in condition for allowance. Claims 5 and 6 are believed to be in condition for allowance at least because of their dependency on claim 4.

Claim 10 has been rewritten in independent form including all of the limitations of the base claim 1 and intervening claim 9, and is therefore believed to be in condition for allowance.

Claim 15 has been rewritten in independent form including all of the limitations of original base claim 1 and is therefore believed to be in condition for allowance.

Claim 27 has been rewritten in independent form including all of the limitations of original base claim 24, and is therefore believed to be in condition for allowance.

Claim 28 has been amended to include the limitations of claim 29, and is therefore believed to be in condition for allowance. Claim 30 is believed to be in condition for allowance at least because of its dependency on claim 28. Claims 28 and 30 are also amended to recite a computer-readable medium, believed to be statutory subjection matter.

§102 Rejection of the Claims

Claims 1, 7-9, 16, 19-21, 28 and 30 were rejected under 35 U.S.C. § 102(e) as being anticipated by Watson et al. (U.S. 2004/0082356). Applicant submits that US publication 2004/0082356 is to "Walton", not "Watson" and believes that the Examiner meant to use the name Walton, not Watson.

Applicant's claims 1 and 16 are directed to adjusting the transmit power level for orthogonal frequency-division multiplexed (OFDM) signal transmissions to an access point based on an access point sensitivity, a path loss, and a link margin variation.

Applicant's claims 1 and 16 recite adjusting transmission power level based on ***three factors***:

1) access point sensitivity,

2) path loss,

3) link margin variation.

None of the cited references disclose the adjustment of the transmit power level of a communication station based on ***all three of these factors***. Applicant submits that the use of these three factors provides for more accurate real-time adjustments in a dynamically changing signal environment. Walton only discloses adjusting the transmit power level based on a received SNR and can not anticipate Applicant's claimed invention as recited in claims 1 and 16.

According to the Examiner on page 2 of the office action, Walton discloses the use of path loss in paragraph [0679] to adjust the transmit power level, however Applicant submits that paragraph [0679] discusses changing the transmit power level based ***only*** on SNR. Walton states that 'the uplink transmit power of each active use station [is controlled] such that the received SNR at the access point is maintained ..." (see Walton paragraph [0679]). Applicant submits that determining the path loss requires the knowledge of additional information, such as the transmit power level used by the transmitting device. There is no such disclosure in Walton.

According to the Examiner on page 2 of the office action, Walton discloses the use of access point sensitivity in paragraph [0680] to adjust the transmit power level, however Applicant submits that paragraph [0680] discusses changing the transmit power level based only on SNR. Walton states "the inner loop adjusts the transmit power of the user terminal such that the received SNR at the access point is maintained near the setpoint" (see paragraph [0680]). Walton further states that setpoint is adjusted to maintain a particular level of performance, such as packet error rate, frame error rate or message error rate (see paragraph [0680]). In other words, the transmit power is set based on SNR and only the desired SNR (setpoint) is changed. Applicant finds no teaching, suggestion or motivation in Walton to set transmit power level based on access point sensitivity. The levels of performance (i.e., packet error rate, frame error

rate or message error rate) used by Walton are determined at the MAC level of a wireless device, not the PHY level and are therefore not the same as an access point sensitivity. Determining an access point sensitivity requires use of PHY level information specific to the access point.

According to the Examiner on page 2 of the office action, Walton discloses the use of link margin variation in paragraph [0682] to adjust the transmit power level, however Applicant submits that paragraph [0682] discloses ***only adjusting a setpoint*** for the SNR for a particular level performance. Link margin variation is not mentioned in Walton. Walton only states that if the PER or FER is exceeded by the occurrence of one or more frame/packet errors, then the set point may be increased (see Walton paragraph [0682]). The setpoint is the desired SNR (see Walton paragraph [0682]).

Applicant finds no teaching, suggestion or motivation in Walton to use access point sensitivity, a path loss, ***and*** a link margin to adjust a transmit power level. Applicant further submits that neither access point sensitivity, a path loss, nor a link margin variation are the same as an SNR, as taught by Walton. Applicant's specification and claims recite several ways that that the access point sensitivity, the path loss, and the link margin variation may be estimated, calculated or determined. The access point sensitivity may be calculated using the SNR ***at the access point,*** but the access point sensitivity is not the same as the SNR at the user terminal, as recited by Walton.

In view of the above, Applicant submit that the rejection of claims 1 and 16 under 35 U.S.C. § 102(e) as being anticipated by Walton et al. has been overcome. Dependent claims 2, 3, 7 – 9, 11 – 13 are believed to be allowable at least because of their dependency on independent claim 1. Dependent claims 17 – 21 are believed to be allowable at least because of their dependency on independent claim 16.

§103 Rejection of the Claims

Claims 2, 3, 17 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Walton et al. in view of Choi et al. (U.S. 2002/0168993).

Choi has been cited for disclosing setting power levels based on path loss for WLANs. The combination of Walton and Choi, however, fails to teach, suggest, or motivate the adjustment transmission power level based on ***three factors***:

1) access point sensitivity,

2) path loss,

3) link margin variation,

as recited in Applicant's independent claims 1 and 16. Accordingly, the combination of Walton and Choi does not result in Applicant's claimed invention. Applicant's submit that the rejection of claims 2, 3, 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Walton in view of Choi has been overcome.

Claims 11-13 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Walton et al. Claims 11 – 13 are believed to be allowable based at least on their dependency on claim 1. Claim 12, further distinguishes over Walton by reciting measuring an average received power level across the subcarriers of the subchannel, setting the initial transmit power level at a predetermined maximum level, and reducing the communication station transmit power level. Walton, on the other hand initially sets the transmit power level to achieve a particular level of performance (see Walton paragraph [0682] lines 1 – 2). The particular level of performance for SNR in Walton does not equate to a predetermined maximum transmit power level as recited in Applicant's claim 12.

Claims 24 and 26 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Walton et al. in view of Batra et al. (U.S. 2004/0151109).

Claim 24 has been amended to recite that the access point sensitivity is calculated by the controller by subtracting the path loss and an access point link margin from the communication station transmit power level. As stated by the Examiner on page 6 of the office action under allowable subject matter, the prior art fails to teach "calculating the access point sensitivity by subtracting the path loss and an access point link margin from the communication station transmit power level. Accordingly, Applicant submits that claim 24 is in condition for allowance. Claims 25 and 26 are believed to be allowable at least because of their dependency on claim 24.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((480) 659-3314) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

CHIH C. TSIEN ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, Minnesota 55402
(480) 659-3314

By /Gregory J. Gorrie/
Gregory J. Gorrie
Reg. No. 36,530